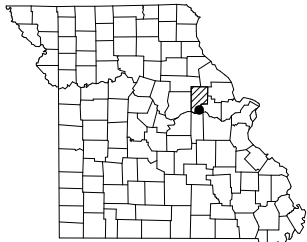


DESIGN DESIGNATION

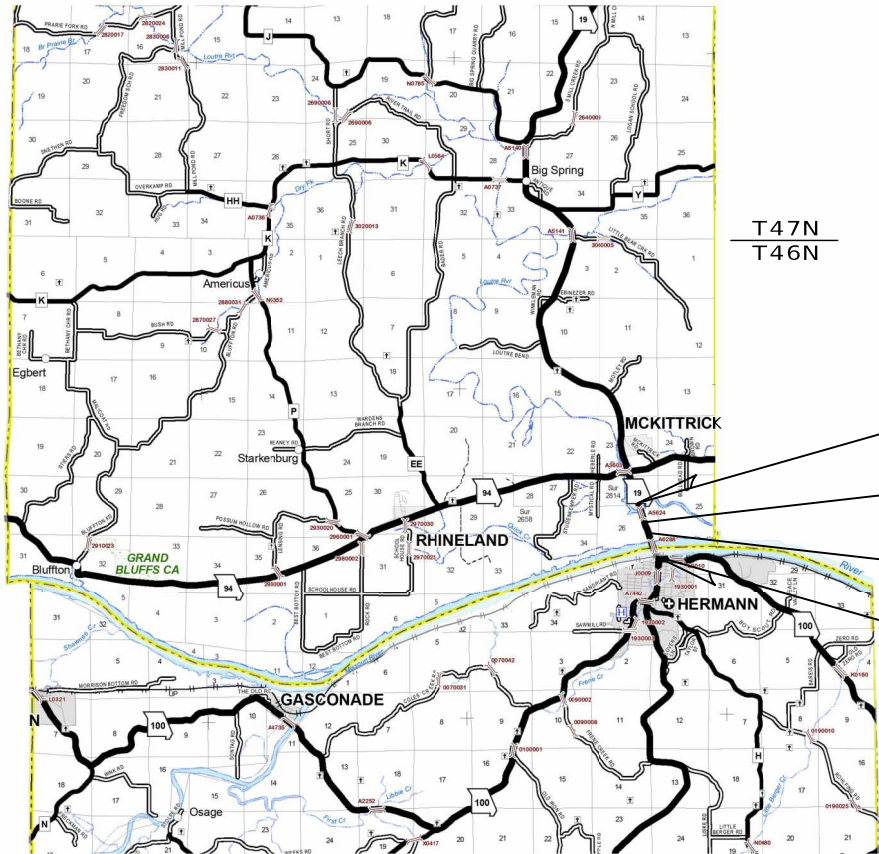
A.A.D.T. - 2023 = 5718
A.A.D.T. - 2043 = 6171
D.H.V. = 9.95%
T = 22.23%
V = 55 M.P.H.
DIRECTIONAL DISTRIBUTION = 49.9% N / 51.1% S
FUNCTIONAL CLASSIFICATION = MINOR ARTERIAL

NO NEW R/W

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
PLANS FOR PROPOSED
STATE HIGHWAY
MONTGOMERY COUNTY
T46N R5W



KEY MAP
LOCATION OF MONTGOMERY COUNTY



SB LOG MI. 73.021
BEGIN PROJECT
SB LOG MI. 73.408

SB LOG MI. 73.522
SB LOG MI. 73.964
END PROJECT

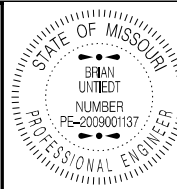
BR. #A5624
EXCEPTION
BR. #A6288
PAVEMENT MARKING
ENTIRE LIMITS
PROJECT LIMITS
BRIDGE DECK SEALING



THE EXISTENCE AND APPROXIMATE LOCATION OF UTILITY FACILITIES KNOWN TO EXIST, AS SHOWN ON THE PLANS, ARE BASED ON THE BEST INFORMATION AVAILABLE TO THE COMMISSION AT THIS TIME. THIS INFORMATION IS PROVIDED BY THE COMMISSION "AS-IS" AND THE COMMISSION EXPRESSLY DISCLAIMS ANY REPRESENTATION OR WARRANTY AS TO THE COMPLETENESS, ACCURACY, OR SUITABILITY OF THE INFORMATION FOR ANY USE. RELIANCE UPON THIS INFORMATION IS DONE AT THE RISK AND PERIL OF THE USER, AND THE COMMISSION SHALL NOT BE LIABLE FOR ANY DAMAGES THAT MAY ARISE FROM ANY ERROR IN THE INFORMATION. IT IS, THEREFORE, THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE, LOCATION AND STATUS OF ANY FACILITY. SUCH VERIFICATION INCLUDES DIRECT CONTACT WITH THE LISTED UTILITIES.

INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
TITLE SHEET	1
QUANTITIES (QU) (2 SHEETS)	2
TRAFFIC CONTROL SHEETS (TC)	3-8
PAVEMENT MARKING (PM)	9
BRIDGE DRAWINGS (B)	
A56242	1-2
A62881	1



DATE PREPARED
4/5/2023
ROUTE 19
STATE MO
DISTRICT NE
SHEET NO. 1
COUNTY MONTGOMERY
JOB NO. JNE0022
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION	DATE

LENGTH OF PROJECT

BEGINNING OF PROJECT	SB LM 73.021
END OF PROJECT	SB LM 73.964
APPARENT LENGTH	0.943 MILES
EQUATIONS AND EXCEPTIONS:	
SB LM 73.408 TO LM 73.522	-0.114 MILES

TOTAL CORRECTIONS	-0.114 MILES
NET LENGTH OF PROJECT	0.829 MILES
STATE LENGTH	0.829 MILES
FOR INFORMATION ONLY ESTIMATED DISTURBED ACRES	0.0 ACRES

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)
MoDOT logo

TITLE SHEET

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



DATE PREPARED 3/2/2023	
ROUTE 19	STATE MO
DISTRICT NE	SHEET NO. 4
COUNTY MONTGOMERY	
JOB NO. JNE0022	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

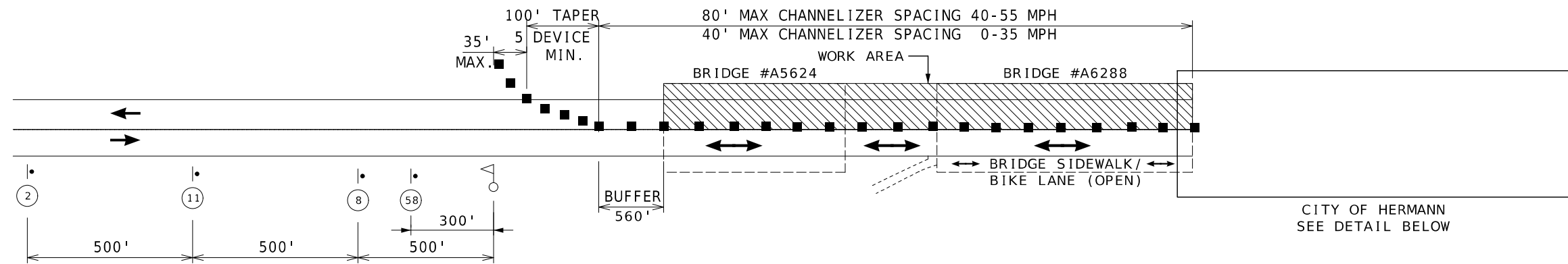
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

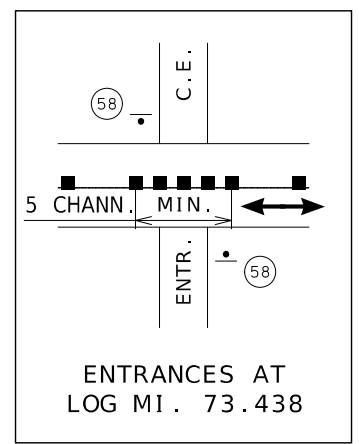
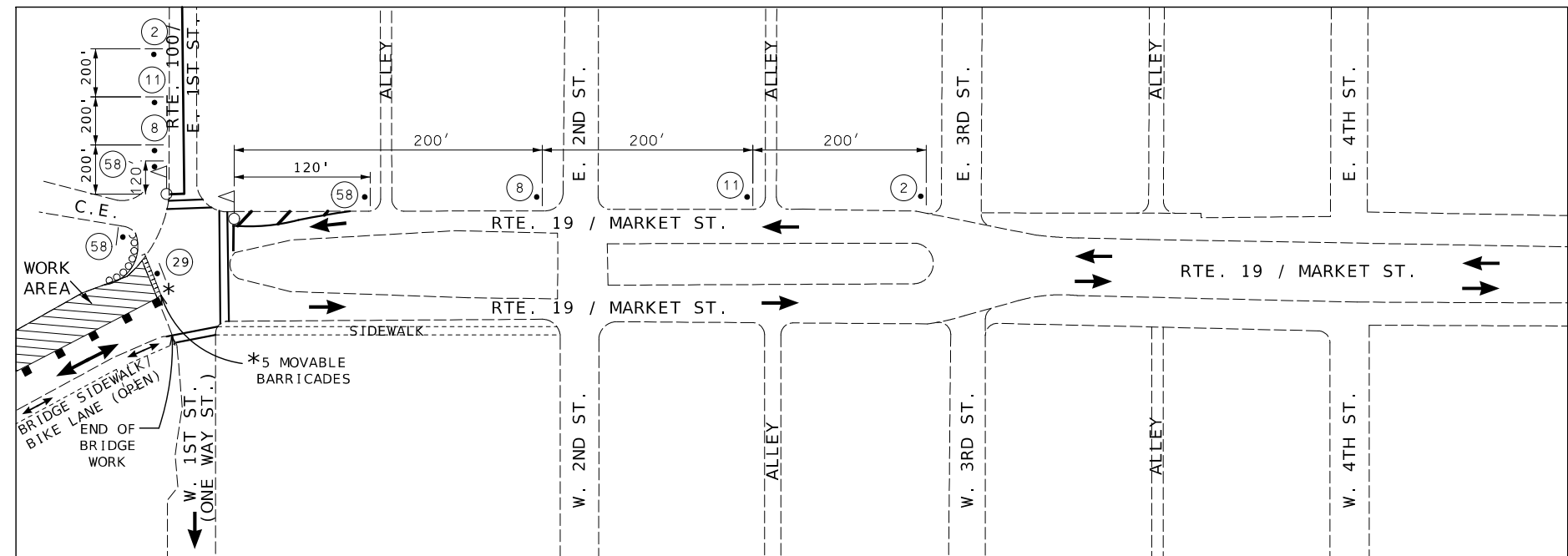
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



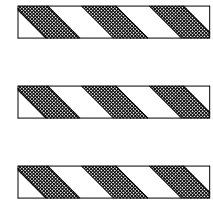
ONE - LANE TWO-WAY OPERATION WITH FLAGGERS (WORK AREA NORTHBOUND LANE)



DETAIL - CITY OF HERMANN

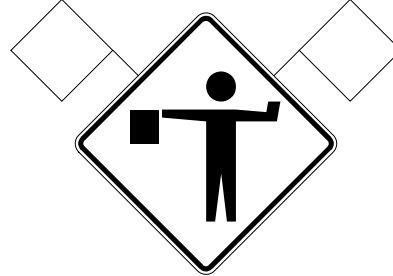


W020-1



2

BRIDGE
OR
RAMP



W020-7a

8



W020-4

11



R11-2

29



GO20-4

53



GO20-4a

58

- FLAGGER
- CHANNELIZER
- TYPE III MOVEABLE BARRICADE

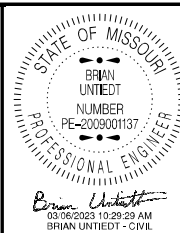
GENERAL NOTES:

- SEE STANDARD PLAN 616.10 FOR DETAILS AND ITEMS NOT SHOWN
- EXISTING SIGNS SHALL BE COVERED DURING WORKING HOURS ONLY IF IN CONFLICT WITH TRAFFIC CONTROL PLANS.
- NO DIRECT PAYMENT WILL BE MADE FOR RELOCATING, COVERING, UNCOVERING OR REMOVING SIGNS.
- ADJUST SIGN SPACING TO FIT FIELD CONDITIONS.

NOTE: FLAG ASSEMBLY WILL BE INCLUDED IN THE COST OF THE SIGN AND WILL NOT BE PAID FOR SEPARATELY.

NOTE: "PILOT CAR FOLLOW ME" SHALL BE THE CONTRACTOR'S RESPONSIBILITY WHEN IN USE DURING OPERATION.
INSTALL ON BACK AND SIDES OF PILOT VEHICLE.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



DATE PREPARED 3/2/2023	
ROUTE 19	STATE MO
DISTRICT NE	SHEET NO. 5
COUNTY MONTGOMERY	
JOB NO. JNE0022	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

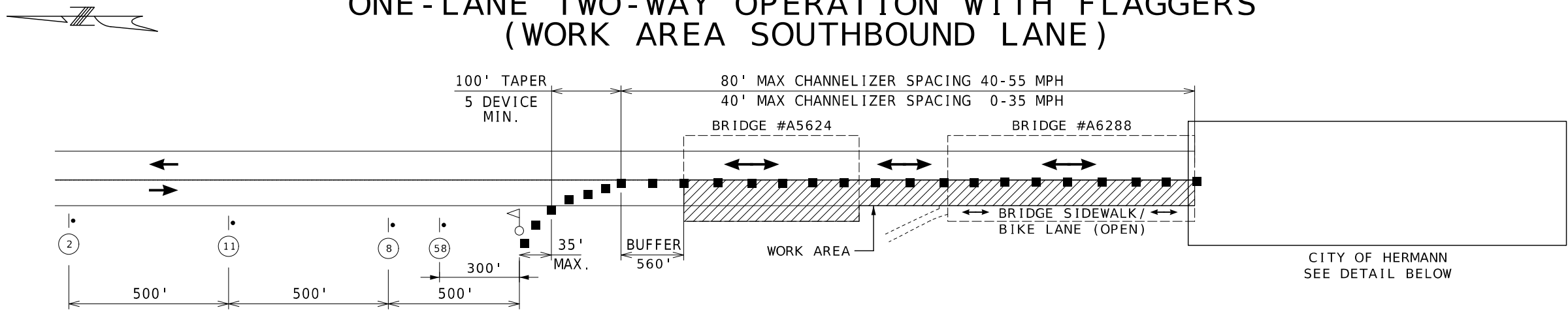
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

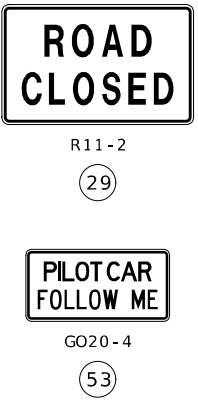
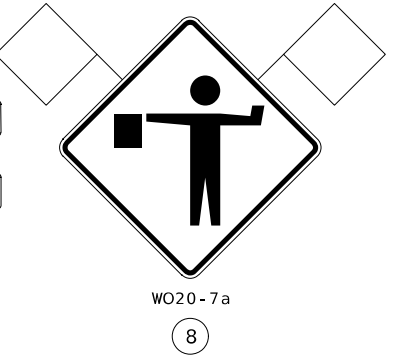
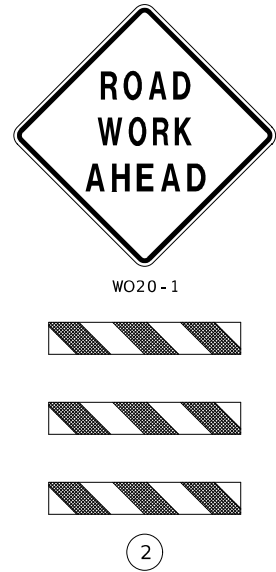
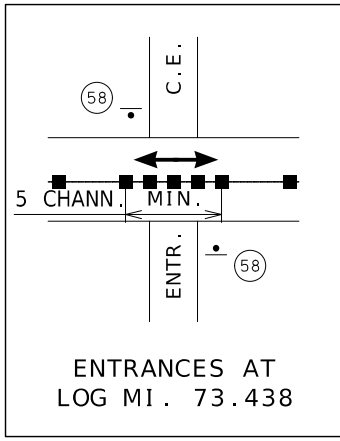
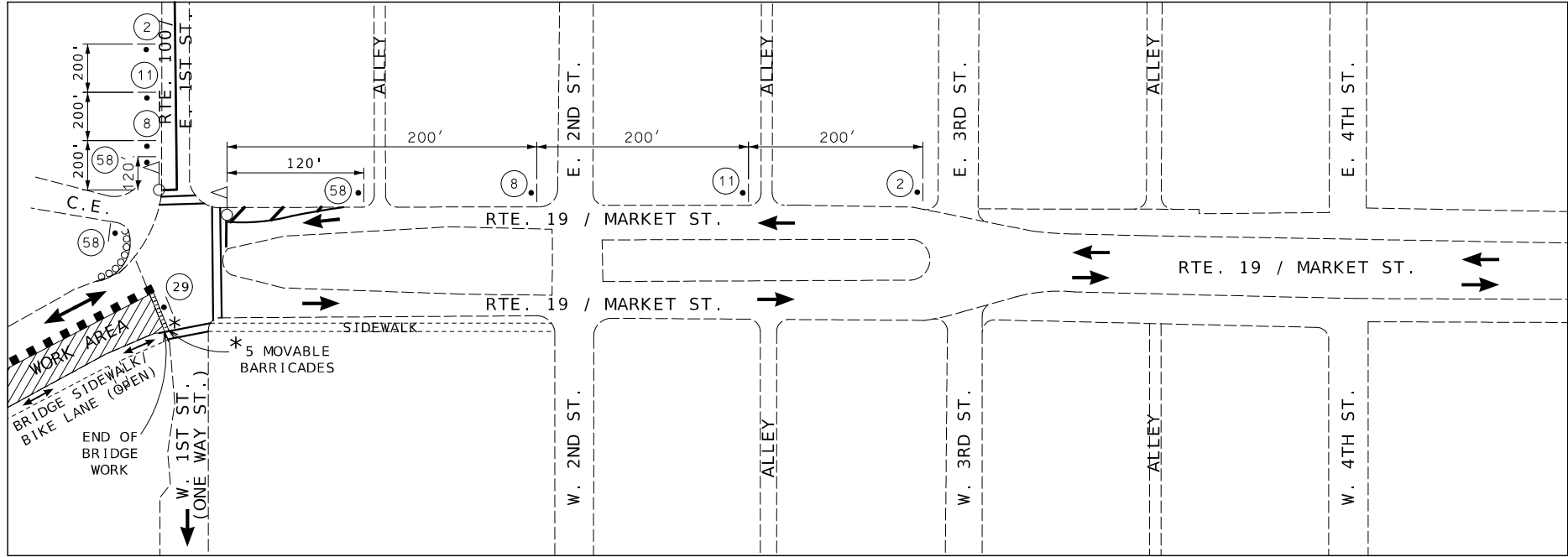
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

ONE - LANE TWO-WAY OPERATION WITH FLAGGERS (WORK AREA SOUTHBOUND LANE)



DETAIL - CITY OF HERMANN

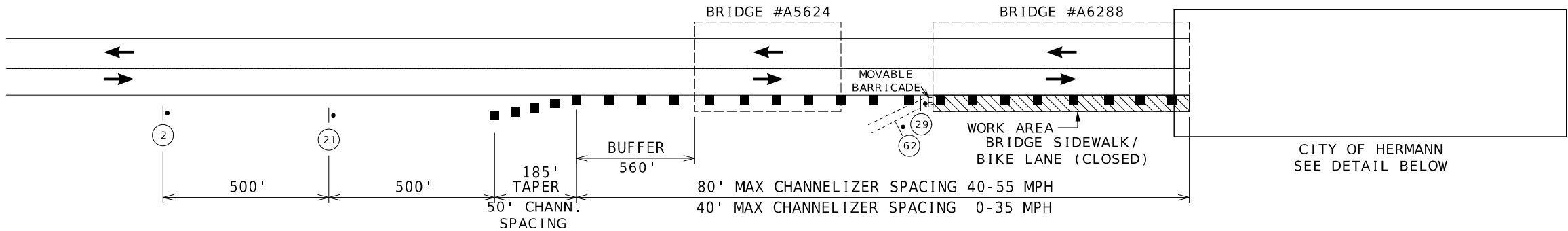


NOTE: FLAG ASSEMBLY WILL BE INCLUDED IN THE COST OF THE SIGN AND WILL NOT BE PAID FOR SEPARATELY.

NOTE: "PILOT CAR FOLLOW ME" SHALL BE THE CONTRACTOR'S RESPONSIBILITY WHEN IN USE DURING OPERATION.

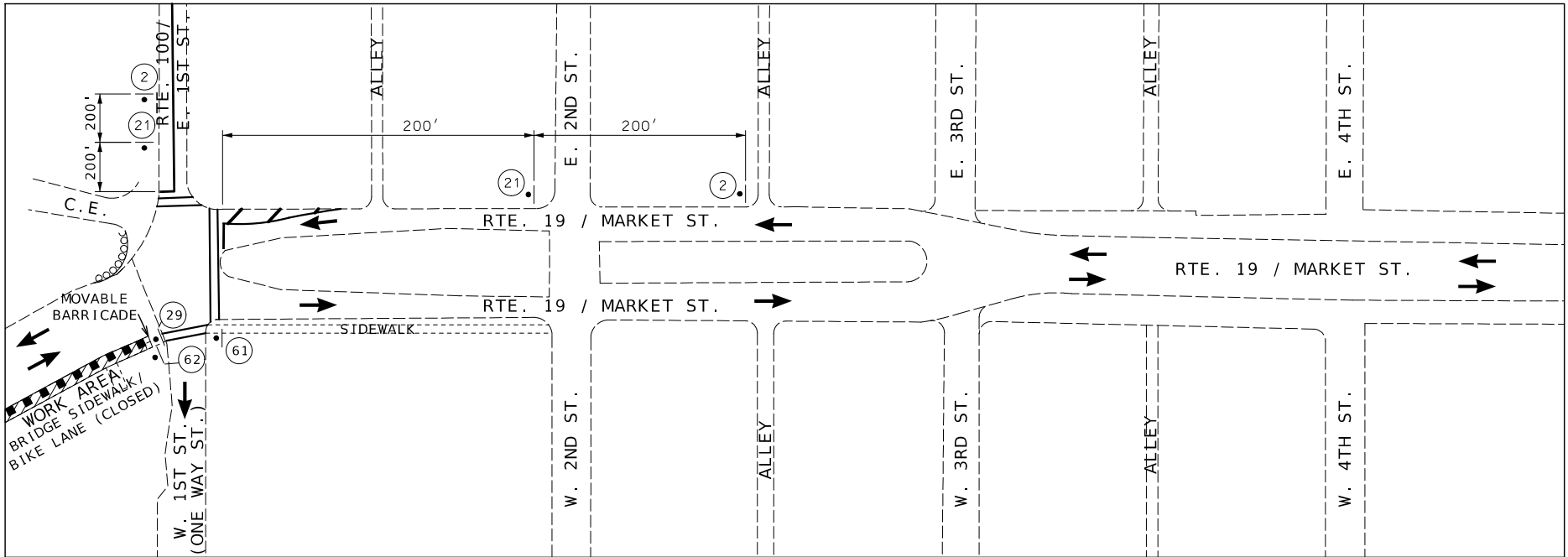
INSTALL ON BACK AND SIDES OF PILOT VEHICLE.

SHOULDER WORK OPERATION
(WORK AREA BRIDGE SIDEWALK/BIKE LANE)



CITY OF HERMANN
SEE DETAIL BELOW

DETAIL - CITY OF HERMANN



W020-1



2

BRIDGE

OR

RAMP



W021-5

21



R11-2

29



R9-11R

61



R9-9

62



FLAGGER



CHANNELIZER



TYPE III
MOVEABLE
BARRICADE



DATE PREPARED
3/2/2023

ROUTE
19

STATE
MO

DISTRICT
NE

SHEET NO.
6

COUNTY
MONTGOMERY

JOB NO.
JNE0022

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

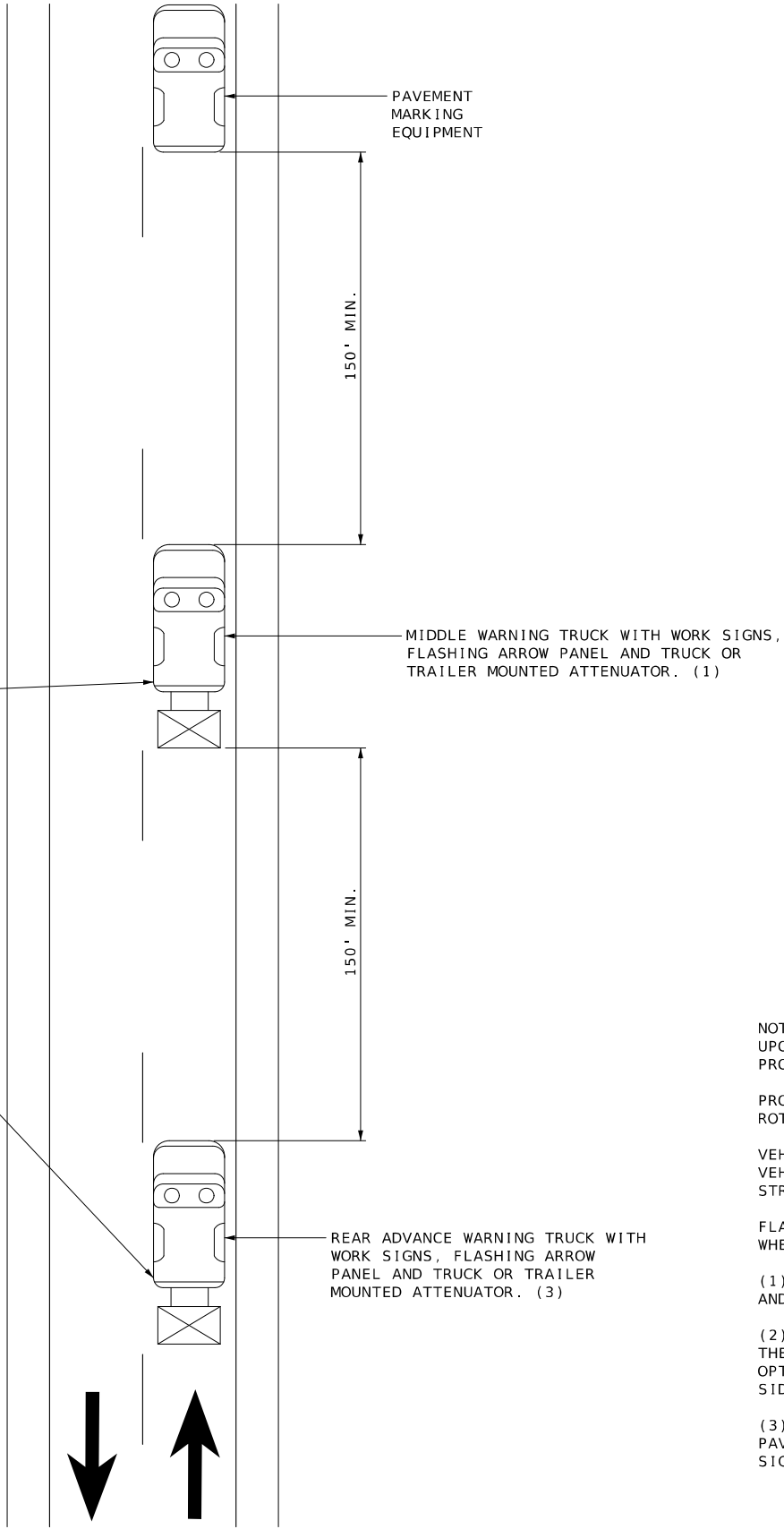
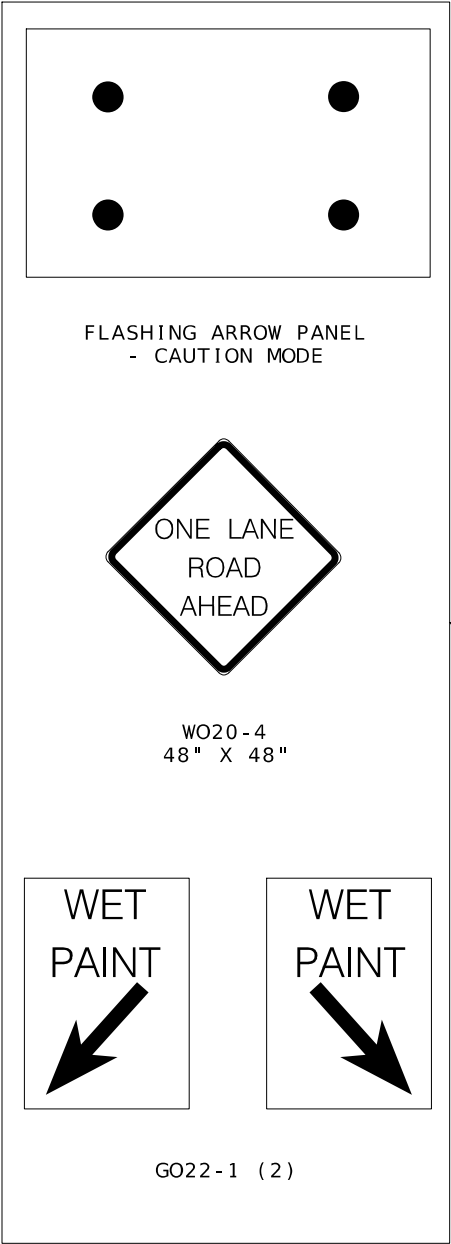
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRAFFIC CONTROL
SHEET 4 OF 6

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



NOTES:
UPON APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY PROVIDE ADDITIONAL PROTECTIVE TRUCK EQUIPPED WITH PROPER WARNING DEVICES.

PROTECTIVE TRUCK AND WORK VEHICLES SHALL DISPLAY HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.

VEHICLE HAZARD WARNING SIGNALS SHALL NOT BE USED INSTEAD OF THE VEHICLE'S HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.

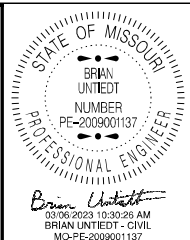
FLASHING ARROW PANELS SHALL BE INCIDENTAL TO TRUCK MOUNTED ATTENUATORS, WHEREVER USED. NO ADDITIONAL PAYMENT SHALL BE MADE.

(1) TRUCK IS OPTIONAL ON TWO-LANE UNDIVIDED HIGHWAYS IF SIGNING AND ARROW BOARD IS MOUNTED ON THE PAVEMENT MARKING EQUIPMENT.

(2) WET PAINT SIGNS ARE INSTALLED TO INDICATE THE SIDE IN WHICH THE PAVEMENT MARKING MATERIAL IS BEING APPLIED. AT THE CONTRACTOR'S OPTION, A FRONT FACING WET PAINT SIGN MAY BE INSTALLED ON THE LEFT SIDE OF THE PAVEMENT MARKING EQUIPMENT.

(3) REAR ADVANCE WARNING TRUCK IS POSITIONED AT THE NO TRACK POINT OF THE PAVEMENT MARKING MATERIAL, OR VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE, OR SPACING SHOWN.

CENTERLINE/EDGELINE STRIPING ON TWO-LANE HIGHWAYS



DATE PREPARED
3/2/2023

ROUTE 19	STATE MO
DISTRICT NE	SHEET NO. 7

COUNTY
MONTGOMERY

JOB NO.
JNE0022

CONTRACT ID.

PROJECT NO.

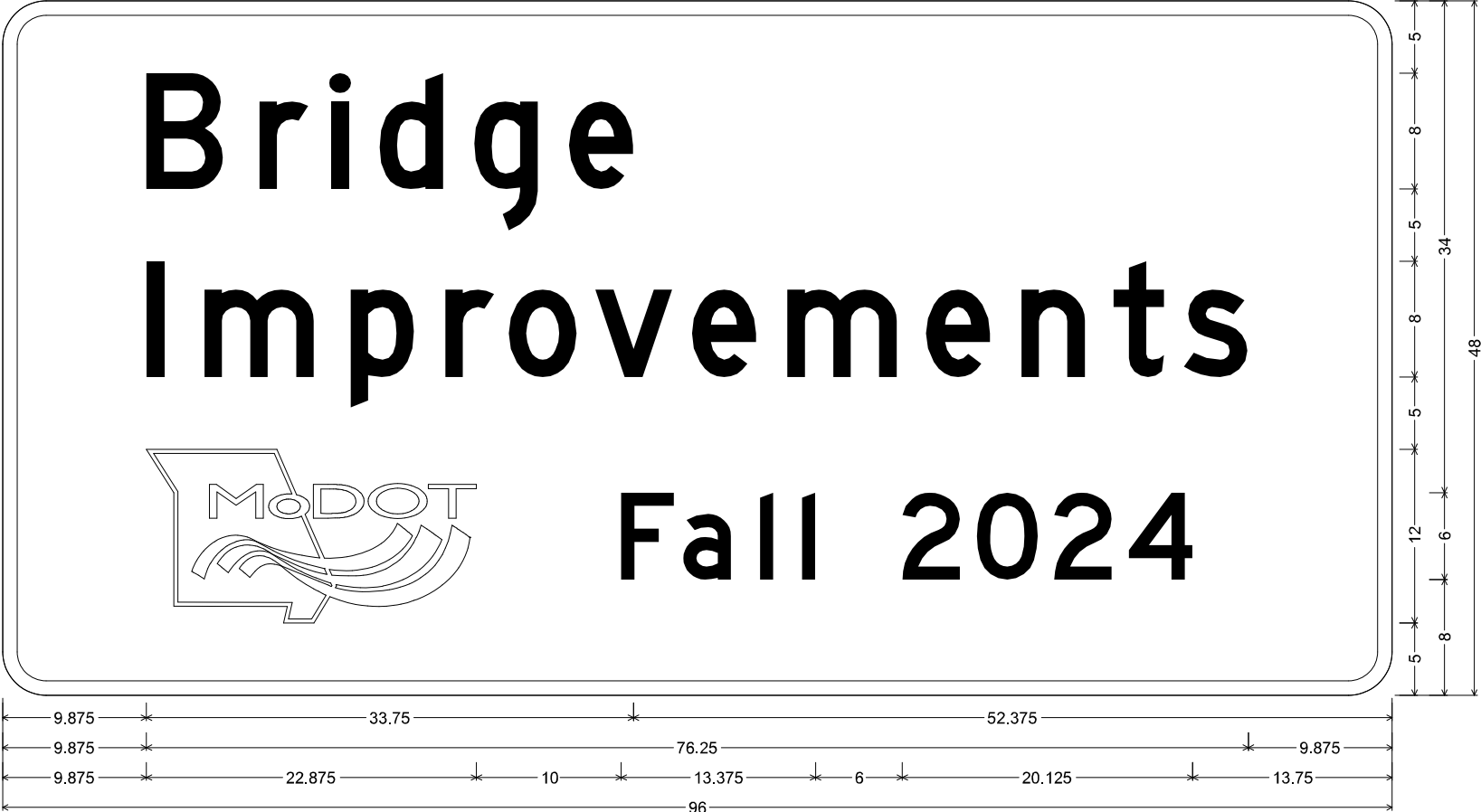
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



CONST-5-96 SH-FLAT SHEET;
3.000" Radius, 1.000" Border, White on, Blue;
"Bridge", D; "Improvements", D; "Fall 2024", D;
Table of letter and object lefts

B	r	l	d	g	e						
9.875	17.750	22.750	26.000	32.625	39.125						
I	m	p	r	o	v	e	m	e	n	t	s
9.875	14.000	24.000	30.625	35.000	41.000	47.625	54.250	63.750	70.375	76.750	81.625
F	a	l	l	2	0	2	4				
9.875	42.750	47.000	52.375	55.250	62.125	67.375	72.625	77.875			



DATE PREPARED 8/3/2023	
ROUTE 19	STATE MO
DISTRICT NE	SHEET NO. 8
COUNTY MONTGOMERY	
JOB NO. JNE0022	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

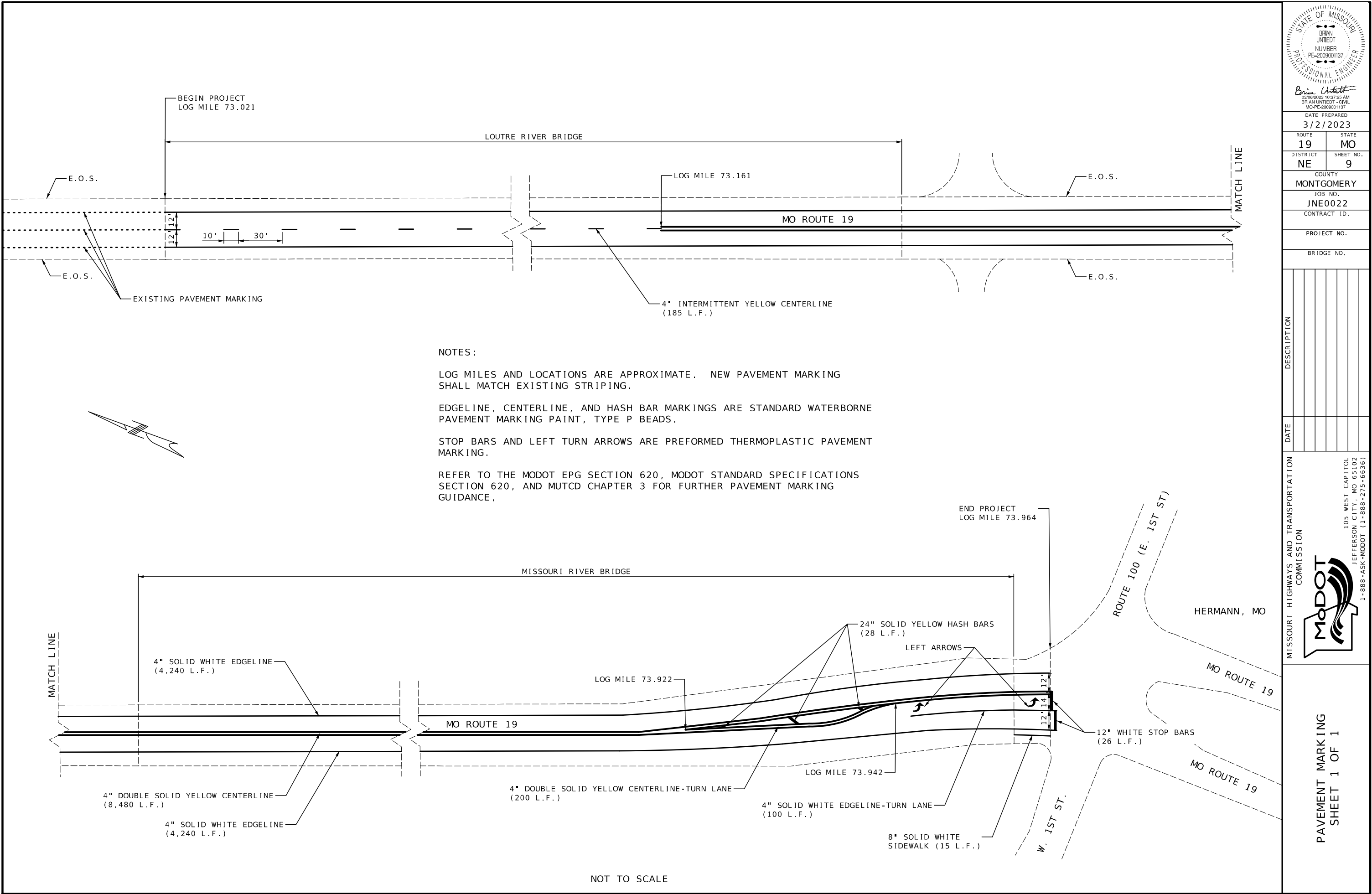
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



STATE OF MISSOURI
BRIAN
UNITED
NUMBER
PE-2009001137
PROFESSIONAL ENGINEER
Brian United
10/16/2023 10:37:25 AM
BRIAN UNITED - CIVIL
MO-PE-2009001137

DATE PREPARED 3/2/2023	
ROUTE 19	STATE MO
DISTRICT NE	SHEET NO. 9
COUNTY MONTGOMERY	
JOB NO. JNE0022	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

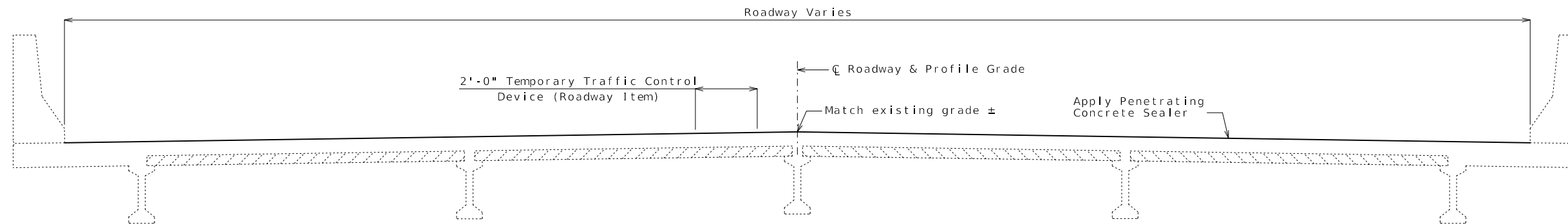
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MODOT

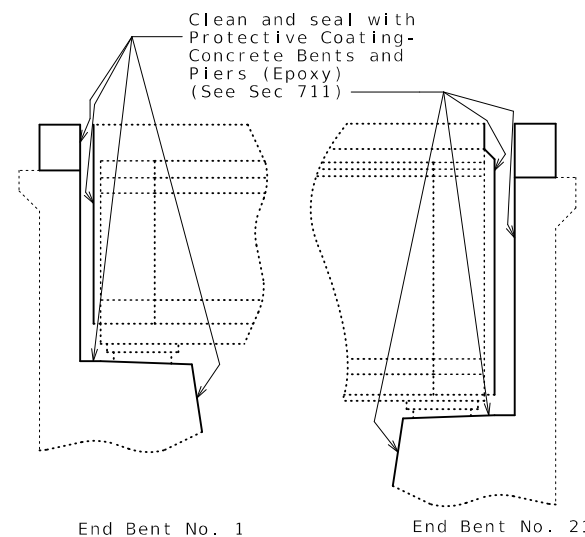
PAVEMENT MARKING
SHEET 1 OF 1

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

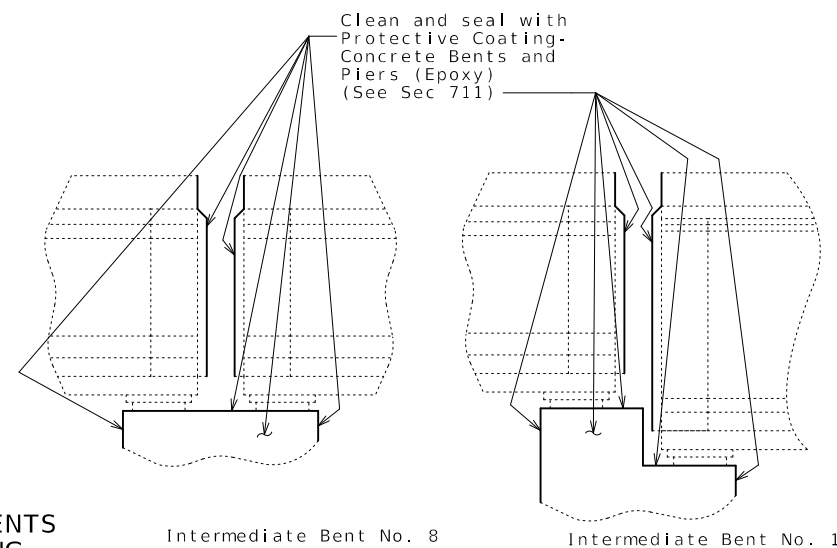
U.I.P. AND REHABILITATE EXISTING (92.4'-6 @ 91')(7 @ 91') PRESTRESSED CONCRETE I-GIRDER, (100'-4 @ 115'-100') BULB-TEE GIRDER SPANS



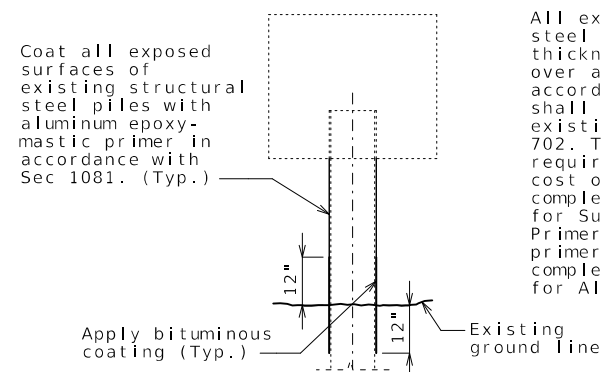
TYPICAL SECTION THRU EXISTING DECK
(Prestressed Concrete I-Girder shown, Bulb-Tee similar)



TYPICAL SECTION THRU INTERMEDIATE BENTS
NO. 1 & 21 SHOWING PROTECTIVE COATING



TYPICAL SECTION THRU INTERMEDIATE BENTS
NO. 8 & 15 SHOWING PROTECTIVE COATING



SECTION THRU INT. BENTS NO.
2-14 SHOWING RECOATING OF PILES

All exposed surfaces of the existing structural steel piles shall be recoated with one 6-mil thickness of aluminum epoxy-mastic primer applied over an SSPC-SP3 surface preparation in accordance with Sec 1081. The bituminous coating shall be applied one foot above and below the existing ground line and in accordance with Sec 702. These protective coatings will not be required below the normal low water line. The cost of surface preparation will be considered completely covered by the contract lump sum price for Surface Preparation for Applying Epoxy-Mastic Primer. The cost of the aluminum epoxy-mastic primer and bituminous coating will be considered completely covered by the contract lump sum price for Aluminum Epoxy-Mastic Primer.

Estimated Quantities		
Item		Total
Removal of Existing Bearings	each	1
Penetrating Concrete Sealer	sq. yard	9190
Protective Coating-Concrete Bents and Piers (Epoxy)	lump sum	1
Surface Preparation for Applying Epoxy-Mastic Primer	lump sum	1
Aluminum Epoxy-Mastic Primer	lump sum	1
Type N PTFE Bearing	each	1

General Notes:

Design Specifications:

2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating = 7

Design Loading:

HS20-44 (Existing)

Concrete Protective Coatings

Protective coating for concrete bents and piers (Epoxy) shall be applied as shown on the bridge plans and in accordance with Sec 711.

Miscellaneous:

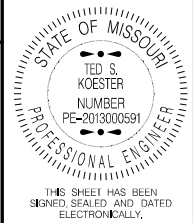
Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (roadway item).

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Contractor shall verify all dimensions in field before ordering new material.

Traffic Handling:

Traffic to be maintained on structure during construction. See roadway plans for traffic control.



DATE PREPARED
4/4/2023

ROUTE 19	STATE MO
DISTRICT BR	SHEET NO. 1

COUNTY
MONTGOMERY

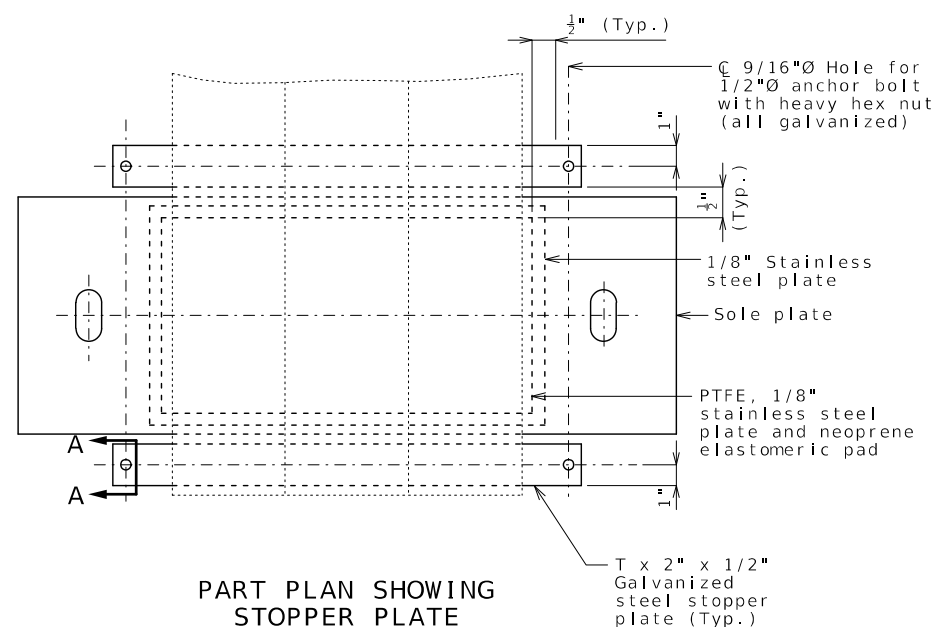
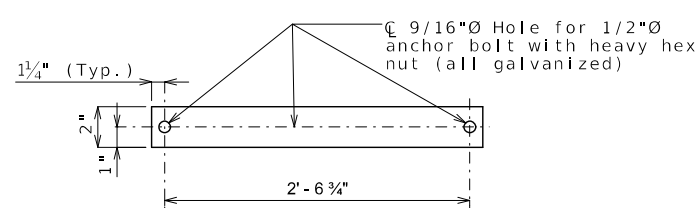
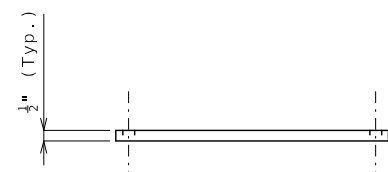
JOB NO.
JNE0022

CONTRACT ID.

PROJECT NO.

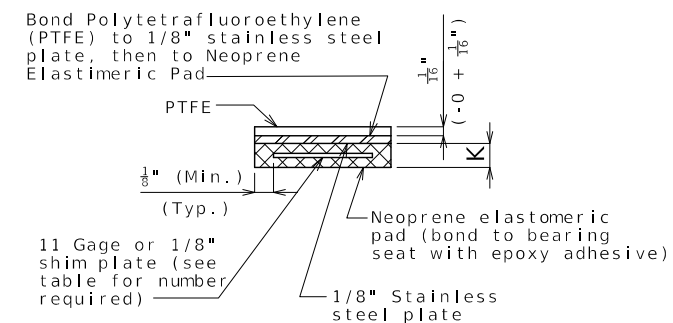
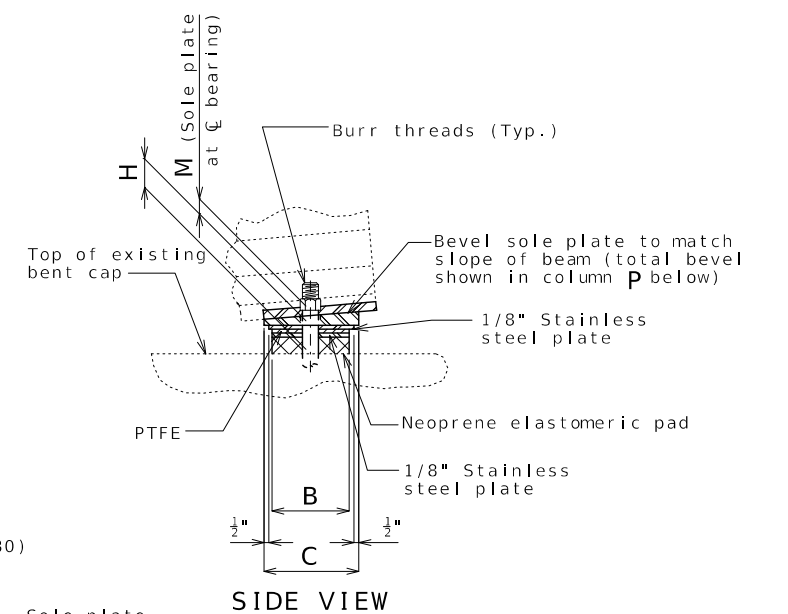
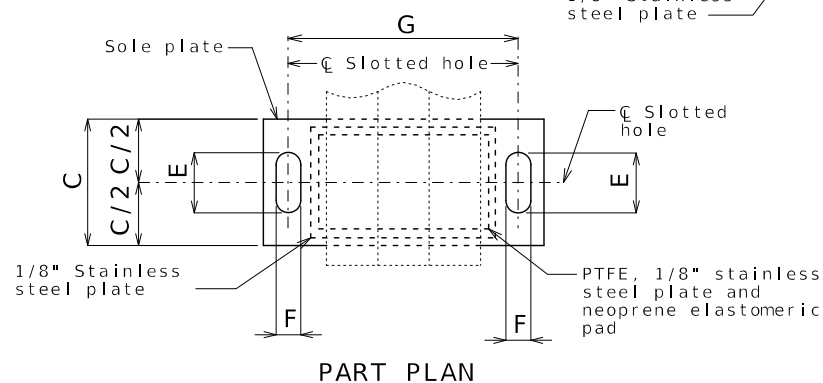
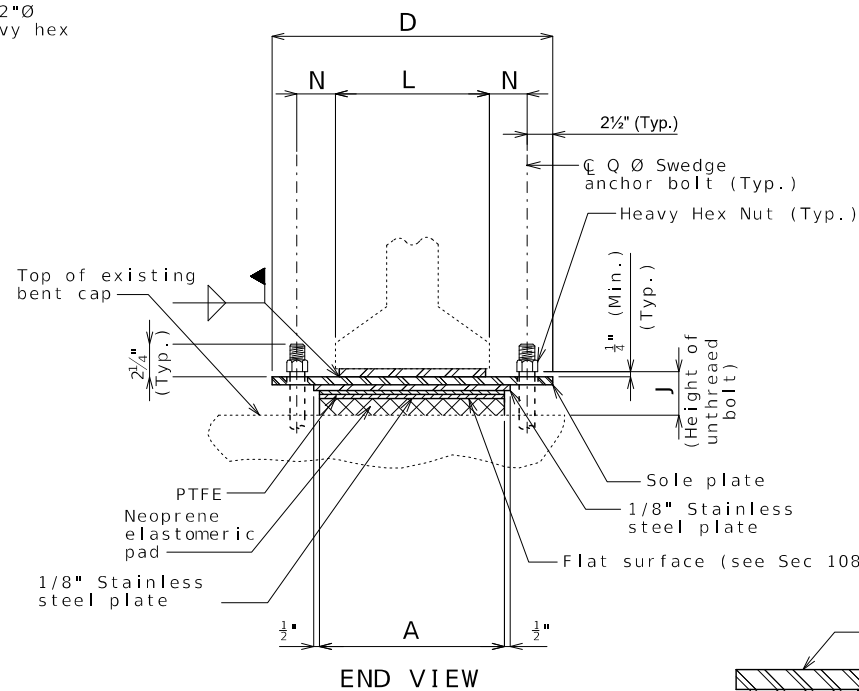
BRIDGE NO.
A56242[illegible]MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



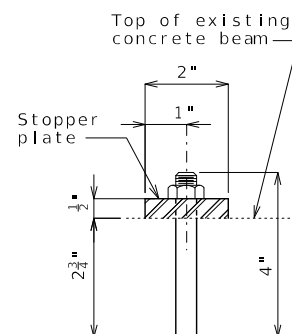
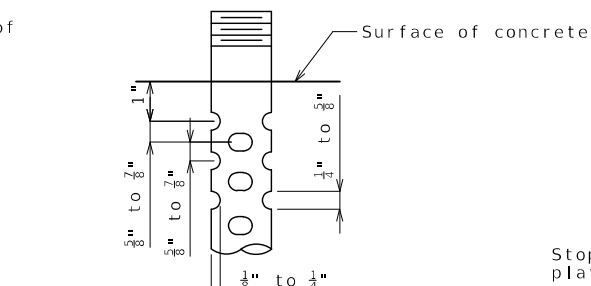
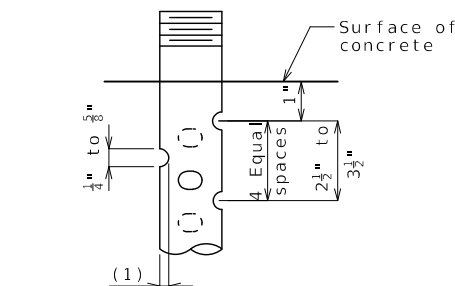
Stopper plates shall be provided to prevent loss of support due to creeping of PTFE bearings. Payment for fabricating and installing the stopper plates will be considered completely covered by the contract unit price for Type N PTFE Bearing.

The bottom face of the 1/8" stainless steel plate that is welded to the sole plate shall be lubricated with a lubricant that is approved by the bearing manufacturer.



PTFE SLIDING BEARINGS																				
BENT NO.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	NUMBER OF SHIM PLATES *	NUMBER REQUIRED
1 (Girder 5)	24"	15"	22"	3'-2½"	8¾"	1¾"	2'-9½"	2½"	3¾"	1¾"	24"	1½"	4¾"	0"	1½"	¾"	15"	2'-9¼"	2	1
* The required shim plate shall be placed between layers of elastomer and molded together to form an integral unit.																			TOTAL BEARINGS	1

* The required shim plate shall be placed between layers of elastomer and molded together to form an integral unit.



Note:

The temporary support shall be capable of safely supporting a service dead load of 100 kips/girder. Factor of safety is not included in these loads. Dead load includes the girder, slab, curbs and a construction load of 50 psf applied to the deck area. Live load with impact is 76 kips (see Special Provisions).

GENERAL NOTES:

Design coefficient of friction equals 0.06.

Anchor bolts shall be Q Ø ASTM F1554 Grade 55 swedged bolts and shall extend S into the concrete with ASTM A563 Grade A Heavy Hex nuts. Actual manufacturer's certified mill test reports (chemical and mechanical) shall be provided. Swedging shall be 1" less than extension into the concrete. Q and S are as shown in the table.

Anchor bolt shall be at the centerline of slotted hole at 60°F. Bearing position shall be adjusted R for each 10° fall or rise in temperature at installation.

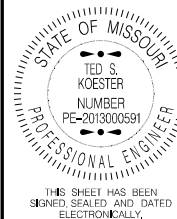
Anchor bolts and heavy hex nuts shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum, or galvanized in accordance with Sec 1081.

Neoprene Elastomeric Pads shall be 70 Durometer.

Structural steel for sole plate shall be ASTM A709 Grade 36 and shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum. The stainless steel plate shall be protected from any coating.

Type N PTFE Bearings shall be in accordance with Sec 716.

PTFE surface shall be fabricated as a single piece. Splicing will not be permitted.



DATE PREPARED
4/5/2023

ROUTE	STATE
10	MO

DISTRICT	SHEET NO
BR	2

COUNTY
MONTGOMERY

FRONT COVER
JOB NO.

JNE0022

CONTRACT ID.

PROJECT NO.

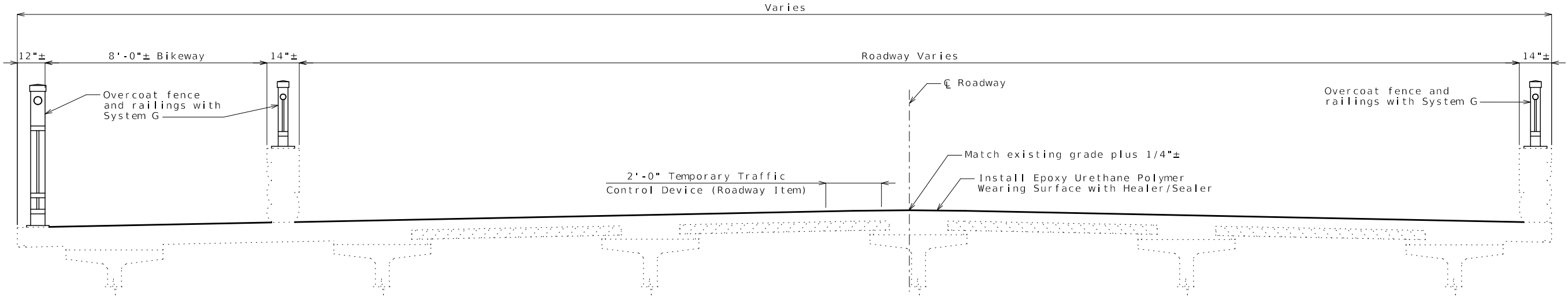
[illegible]MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102

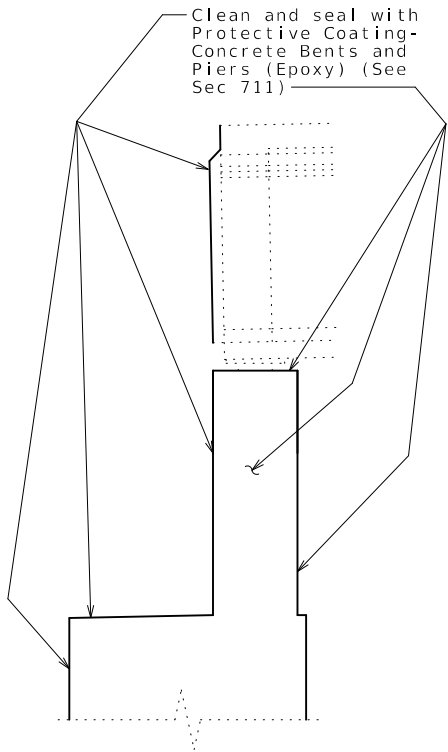
[illegible]

U.I.P. AND REHABILITATE EXISTING (122'-122') PRESTRESSED CONCRETE BULB-TEE GIRDER SPANS,
(340'-460'-425'-315') COMPOSITE PLATE GIRDER SPANS, (110'-120'-120'-110') PRESTRESSED CONCRETE BULB-TEE GIRDER SPANS

SEC/SUR 25 & 26 TWP 46N RGE 5W



TYPICAL SECTION THRU EXISTING DECK
(Prestressed Concrete Bulb-Tee Girder shown, Plate Girder similar)



TYPICAL SECTION THRU INTERMEDIATE BENTS
NO. 3 & 7 SHOWING PROTECTIVE COATING

Estimated Quantities

Item		Total
Epoxy Urethane Polymer Wearing Surface with Healer/Sealer	sq. yard	13,353
Protective Coating - Concrete Bents and Piers (Epoxy)	lump sum	1
Surface Preparation for Overcoating Structural Steel (System G)	lump sum	1
Intermediate Field Coat (System G)	lump sum	1
Finish Field Coat (System G)	lump sum	1

General Notes:

Design Specifications:

2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating = 7

Design Loading:

HS20 Modified (Existing)

Protective Coatings:

Structural Steel Protective Coating: System G in accordance with Sec 1080.

Surface Preparation: Surface preparation of the existing steel shall be in accordance with Sec 1081 for Overcoating of Structural Steel. The cost of surface preparation will be considered completely covered by the contract lump sum price for Surface Preparation for Overcoating Structural Steel (System G).

Field Coats: The color of the field coat shall be Black (Federal Standard #17038). The cost of the intermediate field coat will be considered completely covered by the contract lump sum price for Intermediate Field Coat (System G). The cost of the finished field coat will be considered completely covered by the contract lump sum for Finish Field Coat (System G).

Concrete Protective Coating: Protective coating for concrete bents and piers (Epoxy) shall be applied as shown on the bridge plans and in accordance with Sec 711.

Miscellaneous:

Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (roadway item).

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Contractor shall verify all dimensions in field before ordering new material.

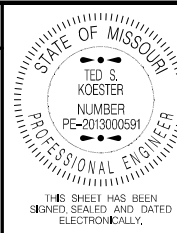
The contractor shall exercise care to insrue spillage over joint edges is prevented and that a neat line is obtained along any terminating edge of the wearing surface.

Traffic Handling:

Traffic to be maintained on structure during construction. See roadway plans for traffic control.

REPAIRS TO BRIDGE: ROUTE 19
OVER MISSOURI RIVER & UPRR

ROUTE 19 FROM ROUTE 94 TO HERMANN
ABOUT 0.1 MILE NORTH OF HERMANN
BEGINNING STATION 13+17.56± (Match Existing)



DATE PREPARED
7/27/2023

ROUTE 19 STATE MO

DISTRICT BR SHEET NO. 1

COUNTY
MONTGOMERY

JOB NO.
JNE0022

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A62881

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.